

REMARKS

The foregoing claim amendments have been made to overcome the rejection of claim 1-9 and 23-31 under 35 U.S.C. 103 as being unpatentable over Warner (US 2002/0162609). A detailed discussion of the claim amendments and why they overcome the rejection follows.

Claim 1 has been amended to recite that the alloy contains both Sc and Zr. As set forth in the subject application (see e.g. Table 5), Applicants have discovered that the combination of these two elements in the alloy results in significant improvements in the tensile and yield strengths of the alloy. Although Warner suggests that at least one of a number of elements, including Sc and Zr can be used in the alloy, Warner does not specifically disclose the use of the Sc and Zr in combination with one another. Further, the strength improvements that are obtained when using both of these elements represent synergistic results that would overcome any prima facie case of obviousness that Warner may have raised. For this reason, Applicants respectfully submit that claim 1 as amended is allowable.

In addition, claims 4-7 further limit the range of Sc to values that have been found to result in the maximum increase in strength. As set forth in the application at paragraph 0035, Applicants discovered that use of 0.22% Sc did not provide near the strength increases obtained when using only 0.06% Sc in combination with Zr. Clearly, Warner's brief mention of using 0.05 to 0.30% Sc does not recognize the foregoing significance. For these reasons also, Applicants respectfully submit that claims 4, 5 and 7 are patentable.

Claim 8 recites the addition of Si and Fe to the recited alloy. Warner only discloses the use of Si and Fe in the various examples, none of which includes Zn in the range of 9.0-11.0% as recited in claim 1. As a result, Applicants respectfully submit that Warner does not disclose overlapping ranges as to claim 8 and therefore does not establish a prima facie case of

obviousness. For this reason also, claim 8 is patentable over Warner. This also applies to claim 30 and new claims 42 and 44, the later of which combines the elements of original claim 23 with those of claim 30.

Claim 23 has been amended to specify that the maximum percentage of Mg and Cu combined is 4.7%. As noted in the application in paragraph 0041 and illustrated in the graph of FIG. 7, strength increases peak when the total percentage of Mg plus Cu is 4.7%. Warner clearly is silent on this relationship between Mg and Cu. For this reason, Applicant respectfully submits that claim 23 as amended, as well as the claims that depend thereon, are patentable over Warner. This also applies to new claim 32, which adds the same limitation to amended claim 1, as well as new claim 35, which combines this limitation with original claim 1.

Claims 26-29, as well as new claims 33 and 34, 38-41 and 47-50 further distinguish the claimed invention over Warner for the same reasons noted previously regarding claims 1 and 4-7.

In view of the foregoing, Applicants respectfully submit that the application is now in condition for allowance. Accordingly, favorable reconsideration of the application is respectfully requested.

Respectfully submitted,

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